

## **AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended) A suspension stop for a motor vehicle wheel, ~~of the type the wheel~~ comprising a fixed member ~~intended~~ adapted to be fixed to the a chassis (2) of the a vehicle and a rotating member ~~intended~~ adapted to be fixed to the suspension spring (4) so as to be rotationally moved under the effect of the forces exerted by the said spring, ~~the said stop being characterised in that it comprises~~ comprising a device for measuring the vertical forces applied to the vehicle wheel, the said device comprising a pulse-generating coder (11) ~~which is fixed to one of the members, a sensor (12) fixed to the other member which is~~ and able to detect these pulses from the coder so as to determine the angular position of the rotating member with respect to the fixed member, and a calculation means able for calculating, from this position, ~~to calculate~~ the corresponding vertical force applied.

2. (Currently Amended) A The stop according to Claim 1, ~~characterised in that it comprises~~ further comprising a bearing provided with a fixed top race (4) forming the fixed member, a rotating bottom race (3) forming the rotating member and rolling bodies (5) disposed between the said races.

3. (Currently Amended) A The stop according to Claim 2, ~~characterised in that it comprises~~ further comprising a top cup (6) associated with the top race (4) and ~~intended~~ adapted to be associated with the chassis (2), and a bottom cup (7) associated with the bottom race (3) and provided with a housing (8) ~~intended~~ adapted to fixedly receive the an end of the suspension spring (4).

4. (Currently Amended) A The stop according to Claim 3, ~~characterised in that~~ wherein the sensor (12) is associated with the top cup (6) so that the sensitive elements of the sensor (12) are positioned opposite to and at an air gap distance from the coder (11).

5. (Currently Amended) A The stop according to Claim 2 ~~or 3~~, ~~characterised in that~~ wherein the sensor (12) is associated with the top race (4) so that the sensitive elements of the sensor (12) are positioned opposite to and at an air gap distance from the coder (11).

6. (Currently Amended) A The stop according to ~~any one of Claims 1 to 3~~, ~~characterised in that~~ wherein the sensor (12) is associated with the chassis (2) so that the sensitive elements of the sensor (12) are positioned opposite to and at an air gap distance from the coder (11) when the stop is mounted on the said chassis.

7. (Currently Amended) A The stop according to any one of Claims 2 to 6, ~~characterised in that~~ wherein the coder (11) is associated with the bottom race (3).

8. (Currently Amended) A The stop according to any one of Claims 3 to 6, ~~characterised in that~~ wherein the coder (11) is associated with the bottom cup (7).

9. (Currently Amended) A The stop according to any one of Claims 3 to 6, ~~characterised in that~~ wherein the bottom cup (7) comprises a part on which the coder (11) is produced.

10. (Currently Amended) A The stop according to ~~any one of Claims 3 to 9~~, ~~characterised in that~~ wherein the bottom (7) and top (6) cups comprise extensions (7d, 6e) which cooperate so as to form a static sealing means.

11. (Currently Amended) A The stop according to ~~any one of~~ Claims 3 to 10, characterised in that wherein at least one of the coder (11) and/or the cups (6, 7) comprise extensions (11a) which rub on one face of the stop so as to form a dynamic sealing means.
12. (Currently Amended) A The stop according to ~~any one of~~ Claims 1 to 14, characterised in that wherein the sensor (12) comprises sensitive elements chosen from amongst Hall effect sensors, magnetoresistors and giant magnetoresistors.
13. (Currently Amended) A The stop according to ~~any one of~~ Claims 1 to 12, characterised in that wherein the coder (11) is formed from a multipole magnetic ring made from synthetic material containing ferrite particles on which there are magnetised a plurality of pairs of North and South poles equally distributed with a constant angular width.
14. (Currently Amended) A method of measuring vertical forces applied to a wheel associated with the chassis (2) of a motor vehicle by means of a stop according to ~~any one of~~ Claims 1 to 13, in which, in addition to the angular position of the rotating member, the steering angle of the wheels and/or the value of the extent to which the suspension is pressed down are used by the calculation means.